

the exposed banks, but was most evident on the stones nearest the water's edge. On examining the stones with a pocket-lens, their surface appeared covered with acicular crystals, and hence it was at first concluded that the incrustation arose from the crystallization of some salt abounding in the waters. On procuring, however, some stones from the water itself, they presented on their surfaces the filaments of a minute conferva, which appeared to be the source of the white crust; but as the existence of the conferva would not explain the crystalline appearance, it was examined under the microscope, and was found to proceed from minute acicular bodies about  $\frac{1}{100}$ th of an inch long and  $\frac{1}{2000}$ th of an inch broad, which were most of them arranged in a stellate form, although many were scattered in all directions. Running under the whole were the filaments of a minute conferva, on which the acicular bodies rested.

In Greville's Scottish Cryptogamic Flora, similar bodies are referred to the genus *Exilaria*, but Dr. Lankester describes the stellate arrangement of the aciculæ as giving to those examined by him a different character from *E. fasciculata*. Hooker, in his continuation of Smith's 'English Flora,' has placed Greville's name as a synonym of *Diatoma truncatum*, from which *D. fasciculatum* is believed not to be distinct.

In Ehrenberg's work on the *Infusoria*, these bodies are figured and described (p. 11. tab. xvii.) as Polygastric animalcules of the family *Bacillariæ*. The genus to which they belong is *Synedra*, and the species which they most closely resemble is the *Synedra Ulna*, which is characterized by being striated, with linear corpuseles, straight, truncated at the sides, flat on the back and belly, with the apex a little dilated as the individuals become aged. The bodies from the Annan are not striated, nor are their ends dilated, although they appear to be full-grown. The siliceous skeletons in which these little animals are invested account for their white appearance. Although similar bodies have been often described both as plants and animals, the author believes that no notice has been taken of their producing the phænomenon here described.

Read also, "Observations on the Genus *Derbe* of Fabricius." By John O. Westwood, Esq., F.L.S.

After noticing the recent memoirs by Messrs. Percheron and Boheman on this little-known Fabrician genus, and its very close relationship to *Otiocerus* and *Anotia* of Kirby, the author states that the Fabrician type of the genus, *D. hæmorrhoidalis*, is quite distinct from the group described as such by the two first-mentioned authors.

He accordingly restricts the generic name *Derbe* to the typical species, with the following characters :

**DERBE.** Rostrum ad medium abdominis extensum, articulo apicali minuto.

Antennæ breviores. Oculi subrotundati. Alæ longiores, angustiores, costâ anticarum ante apicem incisâ, venis numerosis, longitudinalibus, in medio venis transversis conjunctis, medianâ ramos 10 longitudinales emittente; alæ posticæ venâ postcostali 4-fidâ.

In addition to the typical species and *D. nervosa*, Klug, Burm., the author adds the two following species to the typical group :

1. *D. semistriata*, luteo-fulva; alis pallidis costâ magis fulvescenti venis nigricantibus strigisque tenuibus fuscis inter venas (nisi in cellulis apicalibus) dispositis. Expans. alar. lin.  $16\frac{1}{2}$ . Brasilia. Mus. Westw.
2. *D. strigipennis*, pallidè fusco-lutea; thoracis dorso carinâque faciei sanguineis, alarum venis fuscis, strigis tenuibus fuscescentibus inter venas omnes ad apicem alarum carentibus, pedibus albidis. Expans. alar. lin. 14. Brasilia. Mus. Westw.

**MYSIDIA.** Rostrum ultra pedes posticos haud extensum. Antennæ mediocres. Oculi rotundati. Alæ breviores, latiores, pulverosæ; anticæ integræ, venis paucioribus, venâ medianâ ramos tres emittente, ramo medio bifido; posticæ venâ postcostali bifidâ aut trifidâ.

The variation in the position and number of the veins of the wings affording a character of primary importance for distinguishing the preceding groups, the author has at some length entered into an examination of their normal state and direction, and the manner in which they become modified. The following species are referred to this subgenus: *Derbe pallida*, Fab., (described and figured by Percheron from the Copenhagen Cabinet as the type of the genus,) *D. squamigera*, Fab., *D. costalis*, Fab., and probably *D. punctum*, Fab., *D. testacea*, Fab., and *D. nivea*, Fab., as well as the following new species :

*M. albipennis*, parva, tenera; alis albis, anticis puncto parvo ante medium costæ punctis nonnullis ad marginem internum venis transversis punctoque ante apicem nigris, lunulis parvis marginalibus fuscis. Expans. alar. lin. 8. Vera Cruz. Mus. Westw.

*M. lactiflora*, luteo-albida; vertice collarisque margine antico parùm sanguineis, hujus margine postico margineque postico tegularum albis, alis albis margine antico lutescente versus basin maculis tribus parvis maculâque majori ante apicem nigris. Expans. alar. lin.  $12\frac{1}{2}$ . Brasilia. Mus. Westw.

*M. subfasciata*, alba; alis fusco transversè nebulosis puncto ante apicem nigro ad basin areæ parvæ triangularis subapicalis, venis 4 transversis obscuris. Brasilia. Mus. D. Burchell, et Soc. Zool. Lond.

LYDDA. Rostrum brevius. Antennæ breves. Alæ anticæ valdè elongatæ, apice rotundatæ, directione venarum anomalâ; regione venæ medianæ minimâ, aut potius ejus rami in venæ postcostalis ramos transformati.

The type of this subgenus is *Derbe elongata*, Fab., from New Holland, in the cabinet of the Linnean Society.

ZEUGMA. Rostrum ultra basin pedum posticorum extensum. Antennæ rotundatæ. Ocelli obsoleti? Prothorax lateribus pro antennarum receptione concavo-dilatatis. Alæ anticæ oblongo-ovatæ, apice subtruncatæ, venis numerosis longitudinalibus; venâ postcostali ramos 3 posticè, medianâ tantùm tres emittente.

This subgenus is stated to be intermediate between *Derbe* and *Thracia* on the one hand, and *Mysidia* on the other. The only species is

*Z. vittata*, fulva; alis anticis flavidis vittâ latâ mediâ apicem versus deflexâ alterâque posticâ parallelâ apice vittâ abbreviatâ fasciâque tenui transversâ fuscis. In Mus. Soc. Linn.

THRACIA. Rostrum pectore longius. Antennæ capite ferè duplò longiores. Oculi orbiculati. Ocelli nulli? Alæ anticæ longissimæ, angustæ, apice truncatæ, venis 12 longitudinalibus inter angulum apicalem et regionem analem.

This subgenus is proposed for the two African species, *D. sinuosa* and *D. nervosa*, described by Boheman, and considered by him as constituting the first section of the genus. Notwithstanding the difference of its geographical range, the author adds the following species from Java, which agrees with the other two in all the subgeneric characters:

*T. javanica*, fulva; abdomine obscuriore vittâ centrali pallidiori, alis pallidè hyalinis anticis fasciâ latâ costali fuscâ. Java. D. Horsfield. In Mus. Soc. Mercat. Ind.

PHENICE. Rostrum pectore vix longius. Antennæ capite manifestè breviores. Oculi oblongi, vel obovati, distinctè emarginati. Ocelli distincti. Alæ anticæ quam in *Thraciâ* breviores, apice subrotundatæ, venis ferè ut in *Mysidiâ* dispositis, 12 longitudinalibus inter angulum apicalem et regionem analem.

This subgenus is proposed for the three African species, *D. fritillaris*, *fasciolata*, and *stellulata*, described by Boheman, and forming his second section of *Derbe*.

After reviewing the characters of the preceding subgenera, the author expresses the opinion that *Otiocerus* (including *Hypnis*, Burm.) and *Anotia* of Kirby, must also be considered as subgenera of equal rank with the preceding; that *Anotia coccinea*, Guér. Icon.

R. An. MS. pl. 58, f. 3, forms another subgenus; and that the two following groups also constitute two other subgenera of *Derbe*:

**PATARA.** Rostrum ad basin pedum posticorum extensum. Oculi maximi, subtus emarginati. Ocelli obsoleti. Antennæ maximæ, compressæ, verrucosæ, apice subtruncato et setigero. Alæ anticæ longitudine mediocres, apice rotundatæ, venis paucis cellulisque tribus discoidalibus.

*P. guttata*, capite thoraceque fulvis, alis anticis griseo-fuscis margine albo-guttatis. Insula S<sup>ti</sup> Vincentii. D. Guilding. Mus. D. Hope.

*P. albida*, luteo-albida; antennis nigricantibus, alis anticis albis farinosis apicem versus fuscescenti-tinctis, guttis albis sanguineisque ornatis. Insula S<sup>ti</sup> Vincentii. D. Guilding. Mus. D. Hope.

**CENCHREA.** Frons parùm producta. Oculi magni, emarginati. Ocelli 2. Antennæ minutæ, articulo 2do brevi subrotundato. Prothorax latus, lateribus pro receptione antennarum concavo-dilatatis. Alæ anticæ elongatæ, angulo antico apicali valdè obtuso, venis perpaucis longitudinalibus.

*C. dorsalis*, pallidè testaceo-fulva; alis anticis flavescentibus margine interno fuscis apice punctis duobus purpureis. Insula S<sup>ti</sup> Vincentii. D. Guilding. Mus. D. Hope.

The species above described, together with their structural characters, and especially the variations in the direction of the veins of the wings, were illustrated by numerous magnified figures..

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December 15.

Mr. Forster, V.P., in the Chair.

The Rev. William Cuthbert, D.D., and William Griffith, Esq., of the Hon. East India Company's Medical Service, were elected Fellows.

Read, an "Account of two new Genera of Plants, allied to *Ola-cineæ*." By George Bentham, Esq., F.L.S.

The two new genera on which this paper is founded are *Pogopetalum*, Benth., collected by Mr. Schomburgk in British Guiana; and *Apodytes*, named but not described by Prof. Ernst Meyer, among the South African plants collected by Drège. A third genus, *Leretia* of Vellozo, figured in the 'Flora Fluminensis,' is also characterized for the first time.

After noticing the opinions of various authors as to the affinities